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Declaration under Rule 4.17:

— *as to the identity of the inventor (Rule 4.17(i)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*

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(54) Title: LOW PRESSURE SPERM CELL SEPARATION SYSTEM

(57) Abstract: A sperm cell process system providing to generate sperm cell insemination samples having controlled sperm cell fertility characteristics of sperm cells.

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**INTERNATIONAL SEARCH REPORT**

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PCT/US03/24460

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : A01N 1/02; G01N 1/30, 33/48; C07K 1/00; A61B 17/43, A61D 7/00  
US CL : 435/2, 40.51; 530/827, 852; 600/33, 35

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : ((

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
CAPLUS, MEDLINE, EMBASE, BIOSIS, LIFESCI

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PENFOLD, L.M. et al. Comparative Motility of X and Y Chromosomes-Bearing Bovine Sperm Separated on teh basis of DNA Content. Mol. Reprod. and Devlop. 1998, Vol 50, pages 323-327, see entire document.	1-16, 24, 25, 27, 28, 30, 31, 39-54, 58-60
Y	BEYHAN, Z. et al. Sexual Dimorphism in IVM-IVF Bovine Embryos Produced From X and Y CHromosomes-Bearing Spermatozoa Sorted by High Speed Flow Cytometry. Theriogenology. 1999, Vol. 52, pages 35-48, see entire document.	1-16, 23-25, 27, 28, 30, 31, 33, 34, 36, 37, 39-61
Y	RATHI, R. et al. Evaluation of In Vitro Capacitation of Stallion Spermatozoa. Biology of Reproduction. 2001, Vol. 65, pages 462-470, see entire document.	1-9, 17-24, 26, 27, 29, 30, 32, 33, 35, 36, 38, 41-61
Y	BUCHANAN, B.R. et al. Insemination of Mares with Low Numbers of Either Unsexed or Sexed Spermatozoa. Theriogenology. 2000, Vol. 53, pages 1333-1344, see entire document.	1-9, 17-24, 26, 27, 29, 30, 32, 33, 35, 36, 38, 41-61

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"O" document referring to an oral disclosure, use, exhibition or other means	"G" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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